NWS: EHB-6, Maintenance Note 42

DoD: TO 31P1-4-108-620

RDA REMOTE TERMINAL SECURITY PROCEDURES

DOPPLER METEOROLOGICAL RADAR WSR-88D



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Mark S. Paese Director, Maintenance, Logistics and Acquisition Division

DoD APPROVAL:

BY ORDER OF THE SECRETARY OF THE AIR FORCE

Singhira valid

Digitally signed by Ed Berkowitz Date: 2004.03.09 13:36:15 -06'00' Reason: I am approving this document

Date

JOHN P. JUMPER, General, USAF Chief of Staff

Edward L. Berkowitz, Chief Program Branch Radar Operations Center TOMA

1. SUBJECT

Radar Data Acquisition (RDA) Remote Terminal Security Procedures.

2. PURPOSE

This document provides security procedures which must be implemented to remotely access the RDA. Remote access will be allowed to minimize operational impact and possible reduction in radar availability at radars most affected by NWS Maintenance Note 39 and DoD TO 31P1-4-108-615. Remote access will be allowed under strict conditions and only at those radars remote from the controlling WFO. This includes all USAF radars and NWS radars at distant locations. Remote access capability will remain disconnected for the MSCF and for collocated radars, since the impact is not as great.

For additional information concerning this document, contact the Radar Operations Center (ROC) Hotline, Norman, OK; phone number: (800) 643-3363 or (405) 366-2980 or by e-mail at NEXRAD.Hotline@noaa.gov. An electronic copy of this document can be found at the following Internet address:

www.roc.noaa.gov/ssb/sysdoc/techman/tmlinks.asp

3. SITES AFFECTED

See ATTACHMENT 2.

4. ESTIMATED COMPLETION DATE

This maintenance action must be completed and reported no later than 60 days after receipt of this document.

5. EQUIPMENT AFFECTED

Radar Data Acquisition Group.

6. SPARES AFFECTED

Not applicable.

7. MODIFICATION ACCOMPLISHED BY

Site electronics technicians will perform this modification. Two technicians are required to perform this action.

8. MATERIAL REQUIRED

Not applicable.

9. SOURCE OF MATERIALS

Not applicable.

10. SPECIAL TOOLS AND TEST EQUIPMENT REQUIRED

Not applicable.

11. TIME AND PERSONNEL REQUIRED

Work Phases	Work-hours
Unpacking	0.0
Disassembly	0.0
Installation	0.30
Assembly	0.0
Operational Check	0.15
Total Work-hours	0.45

12. DOCUMENTS AFFECTED

Not applicable.

13. VERIFICATION STATEMENT

This modification was successfully tested at the Radar Operations Center.

14. DISPOSITION OF REMOVED AND REPLACED PARTS/MATERIALS

Not applicable.

15. PROCEDURES

Perform the procedures in ATTACHMENT 1.

16. FAA DISTRIBUTION

Not applicable.

17. CHANGES TO TABLE OF CONTENTS (FAA)

Not applicable.

18. RECOMMENDATIONS FOR CHANGES (FAA)

Not applicable.

19. REPORTING INSTRUCTIONS

a. NWS

Report completed maintenance action on WS Form A-26, Engineering Management Reporting System Maintenance Record, according to the instructions in NWS Instruction (NWSI) 30-2104, Engineering Management Reporting System (EMRS), part 2 and Appendix E. Include the following information on the WS Form A-26:

- An Equipment Code of RDA in Block 7.
- The appropriate serial number in Block 8.
- A Mod No. of M42 in Block 17a.

A sample EMRS report is provided as ATTACHMENT 4.

b. DoD

Update the AFTO Form 95 to show TCTO compliance. Report TCTO compliance in accordance with TO 00-20-2, Table 3-10, Rule 9.

Complete ATTACHMENT 3, and return the information to the ROC by one of the four methods below:

(1) Mail Address: Program Branch, Retrofit Management Team

WSR-88D Radar Operations Center 3200 Marshall Ave., Suite 101 Norman, Oklahoma 73072-8028

(2) Fax Number: (405) 573-3480

ATTN: Retrofit Management Team

(3) E-mail Address: NEXRAD.Logistics@noaa.gov

(4) Web Version: http://www.roc.noaa.gov/ssb/logistics/completion.asp

ATTACHMENT 1

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

Initial Conditions:

If the RDA is remotely located from the WFO, this change applies. The System Administrator must perform this procedure at the RDA Man-Machine Interface (MMI), it cannot be done remotely.

NOTES

This modification note addresses the following changes in the pcAnywhere configuration:

- Instructions for a user to change their password with specific syntax/criteria.
- Instructions for the System Administrator to set up a callback feature.
- Initiate logging when the host computer is accessed.

Procedures:

- 1. DoD and NWS sites perform the following:
 - a. At the RDA MMI terminal CPU, re-connect cable 5/105W902 to the rear of the RDA Remote Access Terminal 5A32. This is the TELCO port.
 - b. NWS Redundant sites must perform the following:

NOTE

Before performing the following steps, ensure the active RDA channel is set to channel 2, and that RDA channel 2 is the active channel during normal operations. If RDA channel 2 has a critical failure, it will automatically switch to channel 1.

- (1) At the RDA Remote Maintenance Terminal, re-connect cable 32W900 to the rear of the RDA Remote Maintenance Terminal CPU UD32A9. This is the TELCO port.
- (2) At the RDA MMI terminal CPU, re-connect cable 5/105W902A to the rear of the RDA Remote Terminal 5A38. This is the TELCO port.

ATTACHMENT 1 (Continued)

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

To reset a caller's password, follow steps 2 through 10.

- 2. Open pcAnywhere if it is not already open.
- 3. Click on the **Be a Host PC** icon.
- 4. Right click on the **Modem** icon and then select **Properties** from the drop down menu.

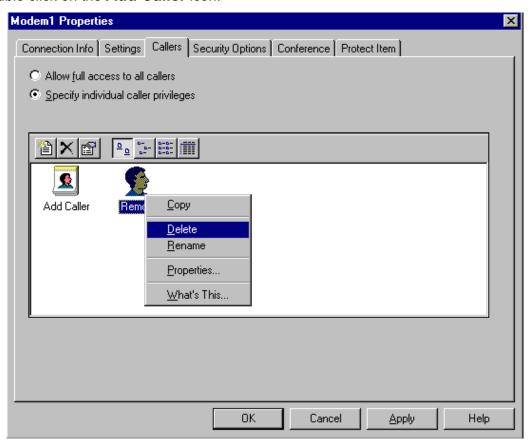


- 5. Click on the Callers tab.
- 6. Check the **Specify Individual Caller Privileges** radio button by clicking on it.
- 7. Right click on the **callers** or **Remote** icon and select **Delete** from the drop down menu.
- 8. Click on the **yes** button to delete the selected item?

ATTACHMENT 1 (Continued)

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

9. Double click on the Add Caller icon.



10. At the New Caller Wizard window, in the Type a name for this Caller, then click Next text box, enter **Remote**, and then click on the **OK** button.

ATTACHMENT 1 (Continued)

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

NOTES

Case sensitivity is important for both User Name and Passwords when they are defined. Future access to both will require the exact case for each letter as entered here.

Each **user name** must meet the following minimum composition requirements:

- Be at least a minimum of three characters in length.
- Contain at least two alpha characters (A through Z or a through z).
- Contain at least <u>one</u> number (0 through 9) or one of the following special characters (!, @, %, -, +, _, {, [, #, or =).

Each **password** must meet the following minimum composition requirements:

- Be at least a minimum of eight characters in length.
- Contain at least one UPPERCASE character (A through Z).
- Contain at least one lowercase character (a through z).
- Contain at least one number (0 through 9).
- Contain at least <u>one</u> special character (!, @, %, (, -, +, {, [, #, =, &, *). All "special" entries <u>must</u> be within the first 8 characters.
- 11. At the New Caller Wizard, enter a unique login name.

ATTACHMENT 1 (Continued)

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

12. Enter a *new password* and confirm the password.



13. Click on the **Next** button and then click on **Finish**.

NOTE

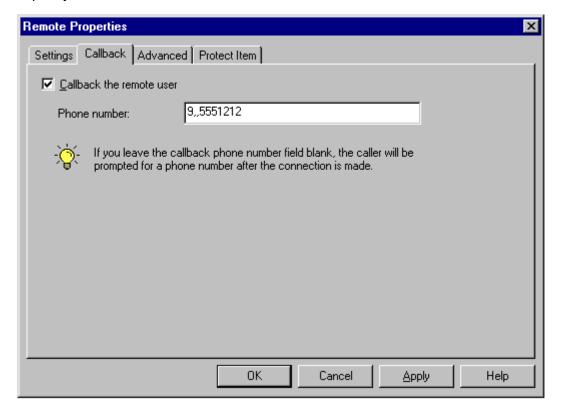
This password will be effective next time you login remotely.

- 14. Right click on the **newly created icon**, and select **Properties**.
- 15. Click on the Call Back tab.
- 16. Check the Callback the remote user box.

ATTACHMENT 1 (Continued)

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

17. Enter the *phone number* to be called - DO NOT LEAVE THIS BLANK. If you do, the caller can specify the number to be called back!



NOTE

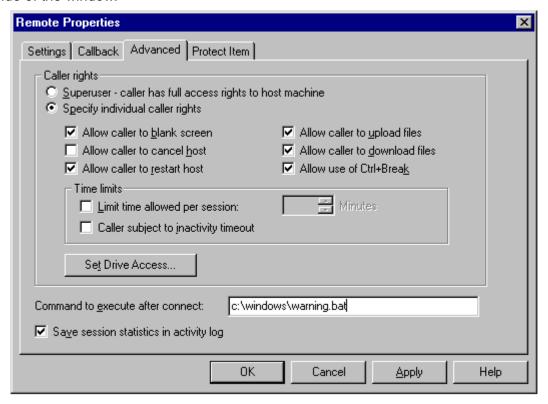
Use a comma to pause the dialing process. A comma represents a 5 second pause. One or two commas may be used, in conjunction with an outside line access number to access an outside line. See the above figure for an example.

18. Click on the **Advanced** tab.

ATTACHMENT 1 (Continued)

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

19. Check the **Save session statistics in activity log** box located at the bottom left hand side of the window.

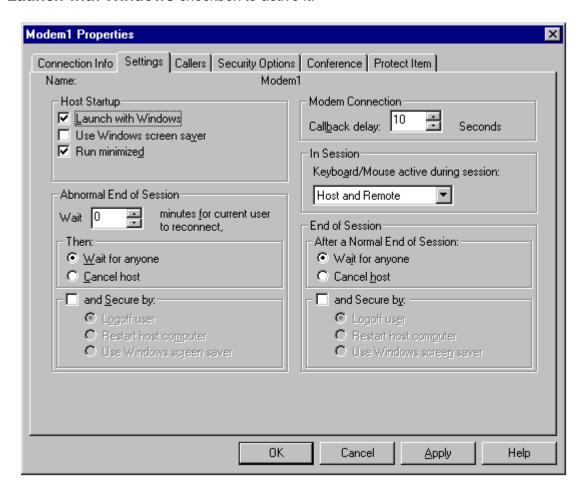


- 20. In the Command to execute after connect: text box, type in
 c:\windows\warning.bat
- 21. Click on **OK** button to close the properties dialog box.

ATTACHMENT 1 (Continued)

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

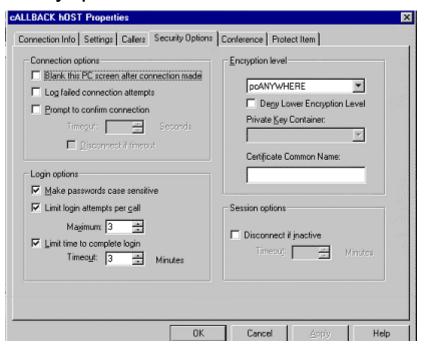
22. Click on the **Settings** tab, and under the Host Startup section of the window, click on the **Launch with Windows** checkbox to active it.



ATTACHMENT 1 (Continued)

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

23. Click on the **Security Options** tab.



- 24. Ensure the **Make Passwords case sensitive** box is checked.
- 25. Ensure Limit login attempts per call is checked and the Maximum: limit is set to 3.
- 26. Ensure Limit time to complete login is checked and the Timeout: limit is set to 3.
- 27. Click on the **OK** button to close the properties dialog box.
- 28. To close the pcAnywhere software, select **File** from the top toolbar and then select **Exit**.
- 29. Shut down any open windows of PCPassport software by clicking anywhere within the window to active it and then press the **<Alt>** and **X** keys at the same time, then press the **X** key again.
- 30. To exit Windows 95, click on the **Start** button on the Windows toolbar and then select **shutdown**.
- 31. Select **Restart the Computer** and click on the **yes** button.

NOTE

Your system should return to pcAnywhere waiting, and the system console and applications should be available.

ATTACHMENT 1 (Continued)

RECONNECTON OF REMOTE ACCESS TO THE RDA AND RPG PROCEDURES

- 32. The following steps are used to verify that the changes have been made.
 - a. Click on the pcAnywhere waiting button on the Windows 95 toolbar.
 - b. Select **cancel** to cancel the connection.
 - c. Open pcAnywhere.
 - d. Click on the **Be a Host PC** icon. (Step 2)
 - e. Right click on the **MODEM** icon and then select **Properties**.
 - f. Click on the **Callers** tab.
 - g. Right click on the icon you created and then select **Properties**.
 - h. Click on the **Settings** tab.
 - i. Verify the Password and Confirm Password fields contain the appropriate character number (at least eight).
 - i. Click on the **Callback** tab.
 - k. Verify the Callback feature is checked and that the phone number is correct.
 - I. Click on the **Advanced** tab.
 - m. Verify the Save session statistics in activity log is checked and c:\windows\warning.bat is displayed in the Command to execute after connect: text box.
 - n. If all the settings are correct as listed above, click on the **Cancel** button.
 - o. Click on the Cancel at the Host Properties window.
 - p. To restore pcAnywhere waiting, select **Action** from the menu bar, and then select **Wait** for connection.

NOTE

Remember your new password will be effective next time you login remotely.

33. Using a laptop or other PC with pcAnywhere installed, dial into the RRRAT terminal (RDA MMI) to verify these changes are complete.

ATTACHMENT 2

EFFECTIVITY

NWS

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
	Eastern Region			
ALBANY	EAST BERNE, NY	RDA	ENX	WN9518
BINGHAMTON	BINGHAMTON, NY	RDA	BGM	WN9515
CARIBOU	HOULTON, ME	RDA	CBW	WN9712
CHARLESTON, SC	GRAYS, SC	RDA	CLX	WN9208
PHILADELPHIA	FORT DIX, NJ	RDA	DIX	WN9950
PORTLAND, ME	GRAY, ME	RDA	GYX	WN9938
RALEIGH/DURHAM	CLAYTON, NC	RDA	RAX	WN9306
ROANOKE	ROANOKE, VA	RDA	FCX	WN9954
STATE COLLEGE	STATE COLLEGE, PA	RDA	CCX	WN9925
WILMINGTON	SHALLOTTE, NC	RDA	LTX	WN9301
	Southern Region			
ALBUQUERQUE	ALBUQUERQUE, NM	RDA	ABX	WP9365
BIRMINGHAM	ALABASTER, AL	RDA	BMX	WP9957
DALLAS/FT WORTH	FORT WORTH, TX	RDA	FWS	WP9259

ATTACHMENT 2 (Continued)

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
JACKSON/BRANDON, MS	BRANDON, MS	RDA	DGX	WP9235
KEY WEST	BOCA CHICA KEY, FL	RDA	BYX	WP9201
LUBBOCK	LUBBOCK, TX	RDA	LBB	WP9933
MEMPHIS	MILLINGTON, TN	RDA	NQA	WP9334
MIAMI	MIAMI, FL	RDA	AMX	WP9918
NORMAN	MIDWEST CITY, OK	RDA	TLX	WP9921
NORTHEAST ALABAMA	HYTOP, AL	RDA	HTX	WP9914
WESTERN ARKANSAS	CHAFFEE RIDGE, AR	RDA	SRX	WP9356
TALLAHASSEE	TALLAHASSEE, FL	RDA	TLH	WP9214
TULSA	INOLA, OK	RDA	INX	WP9356
	Central Region			
DENVER	FRONT RANGE AP, CO	RDA	FTG	WR9469
FARGO/GRAND	FORKS GRAND FORKS, ND	RDA	MVX	WR9750
GRAND ISLAND	BLUE HILL, NE	RDA	UEX	WR9552
GRAND JUNCTION (RDA 2)	GRAND JUNCTION, CO	RDA	GJX	WR9476
GRAND JUNCTION (RDA 1)	GRAND JUNCTION, CO	RDA	GJX	WR9476
LOUISVILLE	FORT KNOX, KY	RDA	LVX	WR9423

ATTACHMENT 2 (Continued)

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
NORTH PLATTE	NORTH PLATTE, NE	RDA	LNX	WR9562
PUEBLO	PUEBLO, CO	RDA	PUX	WR9464
RAPID CITY	NEW UNDERWOOD, SD	RDA	UDX	WR9662
TOPEKA	TOPEKA, KS	RDA	TWX	WR9456
	Western Region			
BILLINGS	BILLINGS, MT	RDA	BLX	WT9677
BOISE	BOISE, ID	RDA	CBX	WT9681
SALT LAKE CITY (RDA 2)	SALT LAKE CITY, UT	RDA	MTX	WT9932
SALT LAKE CITY (RDA 1)	SALT LAKE CITY, UT	RDA	MTX	WT9932
CEDAR CITY (RDA 2)	CEDAR CITY, UT	RDA	ICX	CONCDC
CEDAR CITY (RDA 1)	CEDAR CITY, UT	RDA	ICX	CONCDC
ELKO (RDA 2)	ELKO, NV	RDA	LRX	WT9903
ELKO (RDA 1)	ELKO, NV	RDA	LRX	WT9903
EUREKA (BUNKER HILL)	EUREKA, CA	RDA	BHX	WT9594
FLAGSTAFF (RDA 2)	FLAGSTAFF, AZ	RDA	FSX	WT9375
FLAGSTAFF (RDA 1)	FLAGSTAFF, AZ	RDA	FSX	WT9375
LAS VEGAS	LAS VEGAS, NV	RDA	ESX	WT9386

ATTACHMENT 2 (Continued)

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
LOS ANGELES	LOS ANGELES, CA	RDA	VTX	WT9295
MEDFORD (RDA 2)	MEDFORD, OR	RDA	MAX	WT9597
MEDFORD (RDA 1)	MEDFORD, OR	RDA	MAX	WT9597
MISSOULA (RDA 2)	MISSOULA, MT	RDA	MSX	WT9773
MISSOULA (RDA 1)	MISSOULA, MT	RDA	MSX	WT9773
YUMA (RDA 2)	YUMA, AZ	RDA	YUX	WT9278
YUMA (RDA 1)	YUMA, AZ	RDA	YUX	WT9278
PHOENIX	PHOENIX, AZ	RDA	IWA	WT9278
POCATELLO	SPRINGFIELD, ID	RDA	SFX	WT9578
PORTLAND, OR	PORTLAND, OR	RDA	RTX	WT9698
RENO (RDA 2)	NIXON, NV	RDA	RGX	WT9488
RENO (RDA 1)	NIXON, NV	RDA	RGX	WT9488
SACRAMENTO	DAVIS, CA	RDA	DAX	WT9914
SANTA ANA MTS	SANTA ANA MOUNTAINS, CA	RDA	SOX	WT9918
SAN DIEGO	SAN DIEGO, CA	RDA	NKX	WT9918
SAN FRANCISCO	LOS GATOS, CA	RDA	MUX	WT9933
SEATTLE	EVERETT, WA	RDA	ATX	WT9922
TUCSON	TUCSON, AZ	RDA	EMX	WT9274

ATTACHMENT 2 (Continued)

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
	Miscellaneous			
TRAINING CENTER #2	NWSTC KANSAS CITY, MO	RDA	TTCM7	WB9612
TRAINING CENTER #1	NWSTC KANSAS CITY, MO	RDA	TTCM7	WB9612
DoD				
ALTUS AFB	FREDERICK, OK	RDA	FDR	FE4419
ANDERSEN AFB	ANDERSEN AFB, GU	RDA	UAM	FE5240
BEALE AFB	OROVILLE, CA	RDA	ввх	FE4686
CAMP HUMPHREYS	CAMP HUMPHREYS, KO	RDA	KSGR4	FI5294
CANNON AFB	FIELD, NM	RDA	FDX	FE4855
COLUMBUS AFB	GREENWOOD SPRINGS, MS	RDA	GWX	FE3022
DOVER AFB	ELLENDALE STATE FOREST, DE	RDA	DOX	FE4497
DYESS AFB	MORAN, TX	RDA	DYX	FE4661
EDWARDS AFB	BORON, CA	RDA	YX	FE2805
EGLIN AFB	RED BAY, FL	RDA	EVX	FE2823
FT CAMPBELL	TRENTON, KY	RDA	HPX	FY4812
FT DRUM	MONTAGUE, NY	RDA	TYX	FY4846

ATTACHMENT 2 (Continued)

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
FT HOOD	GRANGER, TX	RDA	GRK	FY4824
FT POLK	FT POLK, LA	RDA	POE	FY4825
FT RUCKER	ECHO, AL	RDA	EOX	FY4805
HOLLOMAN AFB	RUIDOSO, NM	RDA	HDX	FE4801
KADENA AB	KADENA AB, JA	RDA	ODNR5	FH5270
KEESLER AFB MNTC TRNG B	KEESLER AFB, MS	RDA	BIX	FE3010
KEESLER AFB MNTC TRNG A	KEESLER AFB, MS	RDA	BIX	FE3010
KUNSAN AB	KUNSAN AB, KO	RDA	KJKR4	FH5284
LAJES AB	SANTA BARBARA, AZR	RDA	PLAL3	FE4486
LAUGHLIN AFB	BRACKETVILLE, TX	RDA	DFX	FE3099
MAXWELL AFB	CARRVILLE, AL	RDA	MXX	FE3300
MINOT AFB	DEERING, ND	RDA	MBX	FE4528
MOODY AFB	SOUTH STOCKTON, GA	RDA	VAX	FE4830
ROBINS AFB	JEFFERSONVILLE, GA	RDA	JGX	FE2067
VANCE AFB	CHEROKEE, OK	RDA	VNX	FE3029
VANDENBERG AFB	ORCUTT, CA	RDA	VBX	FE4610

ATTACHMENT 3

RECONNECTION OF MSCF AND RDA REMOTE DIAL IN COMPLETION FORM

********* DoD Only will complete and return this form ******** NWS report completion through EMRS

Site Name:					
Site Identifier:	Site Identifier:				
Total Time to Complete this Modification Document:					
Technician's Name(s):	Technician's Name(s):				
Technician's Phone Number:					
Date Completed:					
Problem(s) Encountered:					
Upon completion of this form, return the information to the ROC using one of the four methods below:					
1. Mailing Address:	Program Branch, Retrofit Management Team WSR-88D Radar Operations Center 3200 Marshall Ave., Suite 101 Norman, OK 73072-8028				
2. FAX Number:	(405) 573-3480 ATTN: Retrofit Management Team				
3. E-mail Address:	NEXRAD.Logistics@noaa.gov				

http://www.roc.noaa.gov/ssb/logistics/complete/

4. Web Version:

Attachment 4 - Sample EMRS Report

